What is claimed is:

1. A method of controlling power drawn from an energy converter to supply a load, where the energy converter is operable to convert energy from a physical source into electrical energy, the method comprising changing the amount of power drawn from the energy converter when a supply voltage of the energy converter meets a criterion, said criterion and a change in the amount of power drawn from the energy converter being dependent upon a present amount of power supplied to the load.

2. The method of claim **1** further comprising measuring said supply voltage.

3. The method of claim **1** wherein changing said power drawn from the energy converter comprises decreasing said power drawn from the energy converter by an amount corresponding to a change in said power supplied to the load in a time interval.

4. The method of claim **1** wherein changing said power drawn from the energy converter comprises increasing said power drawn from the energy converter by an amount associated with a range of power supplied to the load.

5. The method of claim **1** further comprising deeming said supply voltage satisfies said criterion when said supply voltage is within a first range of voltages relative to a reference voltage.

6. The method of claim **5** wherein said reference voltage corresponds to a maximum power point of the energy conversion device.

7. The method of claim **5** wherein said first range includes voltages greater than said reference voltage.

8. The method of claim **5** wherein said first range includes voltages less than said reference voltage.

9. The method of claim **5** wherein said first range includes voltages less than said reference voltage and voltages greater than said reference voltage.

10. The method of claim **5** wherein said first range excludes a range of voltages within a limit of said reference voltage.

11. The method of claim **5** wherein said first range is dependent upon a trend in measured voltage.

12. The method of claim **11** wherein said first range is dependent upon a change in voltage occurring after an increase in power.

13. The method of claim **12** wherein said first range is bounded between minimum and maximum limits.

12. The method of claim **1** further comprising performing said method periodically.

13. The method of claim **12** further comprising defining a period for performing said method periodically.

14. The method of claim **13** wherein defining said period comprises defining said period as a function of said power supplied to the load.

15. The method of claim **14** further comprising increasing said period when said power supplied to the load is relatively low and decreasing said period when said power supplied to the load is relatively high.

16. The method of claim **5** further comprising adjusting said reference voltage periodically.

17. The method of claim **5** further comprising increasing said reference voltage when a change in power drawn from the energy converter results in a change in supply voltage within a second range.

18. The method of claim **17** wherein said second range is dependent upon the amount of power being supplied to the load.

19. The method of claim **18** wherein said second range is relatively small when a relatively large amount of power is supplied to the load and wherein said second range is relatively large when a relatively small amount of power is supplied to the load.

20. The method of claim **17** wherein an amount by which said reference voltage is decreased is dependent upon the amount of power supplied to the load.

21. The method of claim **20** wherein the amount by which said reference voltage is decreased is relatively large when the amount of power supplied to the load is relatively low and wherein the amount by which said reference voltage is decreased is relatively low when the amount of power supplied to the load is relatively high.

22. An apparatus for controlling an energy transfer device operable to draw electrical energy from an energy converter operable to convert energy

from a physical source into electrical energy, and supply said electrical energy to a load, the apparatus comprising:

a load power sensor operable to measure power supplied to the load by the energy transfer device ;

a voltage sensor operable to measure a supply voltage the energy converter; and

a processor, in communication with said voltage sensor, said load power sensor and the energy transfer device, said processor being configured to cause the energy transfer device to change the amount of power drawn from the energy converter when the supply voltage of the energy converter meets a criterion, said criterion and the change in power drawn from the energy converter being dependent upon a present amount of power being supplied to the load.

23. The apparatus of claim **22** wherein said processor is configured to decrease said power drawn from the energy converter by an amount corresponding to a change in said power drawn from the energy converter in a time interval.

24. The apparatus of claim **22** wherein changing said processor is configured to increase said power drawn from the energy converter by an amount associated with a range of power supplied to the load.

25. The apparatus of claim **22** wherein said processor is configured to deem said supply voltage satisfies said criterion when said supply voltage is within a first range of voltages relative to a reference voltage.

26. The apparatus of claim **25** wherein said reference voltage corresponds to a maximum power point of the energy conversion device.

27. The apparatus of claim **25** wherein said first range includes voltages greater than said reference voltage.

28. The apparatus of claim **25** wherein said first range includes voltages less than said reference voltage.

29. The apparatus of claim **25** wherein said first range includes voltages less than said reference voltage and voltages greater than said reference voltage.

30. The apparatus of claim **25** wherein said first range excludes a range of voltages within a limit of said reference voltage.

31. The apparatus of claim **25** wherein said first range is dependent upon a trend in measured voltage.

32. The apparatus of claim **31** wherein said first range is dependent upon a change in voltage occurring after an increase in power.

33. The apparatus of claim **32** wherein said first range is bounded between minimum and maximum limits.

34. The apparatus of claim **22** wherein said processor is configured to periodically measure said supply voltage and change said supply power drawn from the energy converter accordingly.

35. The apparatus of claim **34** wherein said processor is configured to define a period for measuring said supply voltage.

36. The apparatus of claim **35** wherein said processor is configured to define said period as a function of said power supplied to the load.

37. The apparatus of claim **36** wherein said processor is configured to increase said period when said power supplied to the load is relatively low and decrease said period when said power supplied to the load is relatively high.

38. The apparatus of claim **25** wherein said processor is configured to adjust said reference voltage periodically.

39. The apparatus of claim **25** wherein said processor is configured to increase said reference voltage when a change in power drawn from the energy converter results in a change in supply voltage within a second range.

40. The apparatus of claim **39** wherein said second range is dependent upon the amount of power being drawn from the energy converter.

41. The apparatus of claim **40** wherein said second range is relatively small when a relatively large amount of power is being drawn from the energy converter and wherein said second range is relatively large when relatively small amounts of power are being drawn from the energy converter.

42. The apparatus of claim **39** wherein said processor is configured to decrease said reference voltage by an amount dependent upon the amount of power supplied to the load.

43. The apparatus of claim **42** wherein said processor is configured to decrease said reference voltage by a relatively large amount when the power supplied to the load is relatively low and to decrease said

reference voltage by a relatively small amount when the power supplied to the load is relatively high.

44. The apparatus of claim **22** wherein said processor includes an output operable to provide a power command signal to said energy transfer device, and wherein said processor is configured to produce said power command signal to represent said change in power to be drawn from the energy conversion device.

45. A system comprising the apparatus of claim **1** and further comprising said energy transfer device.

46. The system of claim **45** wherein said energy transfer device includes a DC to DC converter connected between said energy converter and said load.

47. The system of claim **46** wherein said energy transfer device includes a Dc to AC inverter connected between said DC to DC converter and said load.

48. The system of claim **45** further comprising said load.

49. The system of claim **48** wherein said load includes an AC power grid.

50. The system of claim **45** wherein said processor includes an output operable to provide a power command signal to said energy transfer device, and wherein said processor is configured to produce said power command signal to represent said change in power to be drawn from the energy conversion device.

51. An apparatus for controlling an energy transfer device operable to draw electrical power from an energy converter operable to convert energy

from a physical source into electrical energy, and supply said electrical energy to a load, the apparatus comprising:

means for measuring power supplied to the load by the power transfer device ;

means for measuring a supply voltage of the energy converter; and

means, in communication with said means for measuring power, said means for measuring voltage and the energy transfer device, for changing the amount of power drawn from the energy converter by the energy transfer device when a supply voltage of the energy converter meets a criterion, said criterion and a change in the amount of power drawn from the energy converter being dependent upon a present amount of power being supplied to the load.

52. A computer readable medium encoded with codes for directing a processor to control an energy transfer device operable to draw power from an energy converter operable to convert energy from a physical source into electrical energy, and supply said energy to a load, the codes directing the processor to cause the energy transfer device to change the amount of power drawn from the energy converter when a supply voltage of the energy converter meets a criterion, said criterion and a change in the amount of power drawn from the energy converter being dependent upon a present amount of power supplied to the load.

53. A computer readable signal encoded with codes for directing a processor to control an energy transfer device operable to draw power from an energy converter operable to convert energy from a physical source into electrical energy, and supply said energy to a load, the

codes directing the processor to cause the energy transfer device to change the amount of power drawn from the energy converter when a supply voltage of the energy converter meets a criterion, said criterion and a change in the amount of power drawn from the energy converter being dependent upon a present amount of power supplied to the load.